

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Tacony Corporation

#### Missouri Enterprise

#### Tacony Corporation Assisted With New Product Development

##### Client Profile:

Tacony Corporation distributes and manufactures several lines of vacuum cleaners under the Simplicity and Riccar name. The vacuum cleaners are assembled in a facility located in St. James, Missouri. The product lines are sold exclusively through a network of dealers throughout the US. The Fenton, Missouri, facility employs 175 people.

##### Situation:

Tacony decided that several of their upright vacuum product lines were ready for replacement. It was also decided to not only develop a vacuum with new aesthetics, but to incorporate several new vacuum technologies. Although they do have an engineering staff, the size of this project warranted the need for some additional engineering support. Ideally, Tacony needed individuals that had expertise in plastics design, mechanical design and computer-aided design as well as experience with vacuum cleaner technology. Tacony looked to Missouri Enterprise, a NIST MEP network affiliate, due to a relationship that has been formed over the past 7 years, through partnering on several projects. Tacony asked Missouri Enterprise for assistance in the concept development, as well as detail design on the new product lines.

##### Solution:

Missouri Enterprise utilized their product design experience to aid in all facets of the design process including concept development, mechanical design, detail design and computer aided design. The additional support staff allowed Tacony to continue to support ongoing development projects as well as supporting existing production. The design process was completed in February, and the process moved to the tooling phase. Missouri Enterprise helped in coordinating the delivery and communication of product specifications to local and oversea suppliers. Currently the tooling phase is nearing completion with the first round of part sampling. Initial indications are very positive in regards to part fit and mechanical issues. Missouri Enterprise will continue to support the design phase through first article acceptance, product testing and into first run production. The introduction of this product, along with its market impact, is greatly anticipated. Missouri Enterprise is proud to once again partner with Tacony in its goal to be an industry leader in floor care products.

##### Results:

- \* Developed and designed new product line.
- \* Anticipated market impact due to new product.

##### Testimonial:

"Tacony Corporation has had a close working relationship with MAMTC/Missouri Enterprise for the past 7 years. In that time, Missouri Enterprise has assisted Tacony's R&D department and

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manufacturing division in various capacities including assisting with the design of 5 different upright vacuum cleaners and a power nozzle. Rich Reis was and is a major part of each of these design efforts. The latest upright project that Rich refers to in this success story is the most technically complex design project we have ever undertaken. Rich's involvement in the tremendous undertaking was irreplaceable. His input led to a very robust design that was done in an extremely short period of time and under budget. He helped incorporate many "design for manufacturing and assembly" features, keeping overall product cost as low as possible. Bob Beckman and Keith Green of Missouri Enterprise also made significant contributions on this design project. I can't thank Rich Reis and Missouri Enterprise enough for the incredible contributions they have made to Tacony Corporation over these many years, and I look forward to many more mutually productive years together."

David Hamm, Director of R&D